

ABSTRACT OF THE DISCLOSURE

A composition for forming a porous dielectric film which is prepared by dissolving a siloxane-based precursor containing hydroxyl groups or alkoxy groups and a pore-generating material together with a condensation catalyst generator capable of curing the siloxane-based resin precursor, in an organic solvent. The porous dielectric film has a low dielectric constant and improved physical properties and is formed by coating the composition onto a substrate, followed by light exposure to cause polycondensation at low temperature. A method for forming a negative pattern of a porous dielectric film is also provided without the use of a photoresist by exposing the coated film to light through a mask, and removing unexposed regions with a developing agent.